

Amendment to the Claims:

1. (Previously Presented) In a wireless communication system having at least one repeater and a geolocation system for determining the location of a mobile appliance by measuring an attribute of the mobile appliance's uplink signal, a method of determining if the uplink signal is received directly from the mobile appliance or via the at least one repeater, comprising:

- estimating the location of the mobile appliance by the geolocation system;
- determining an accuracy of the estimate;
- determining if a Timing Advance (TA) of the uplink signal can be associated with the Equivalent Propagation Distance (EPD) of the at least one repeater,
- determining which receivers have received the uplink signal;
- determining which transmitted signals are received by the mobile appliance;
- determining the relationship between the power of the received signals and the power at which the mobile appliance transmitted the uplink signal;
- determining at least one figure of merit based on two or more of the accuracy of the estimate, the TA of the uplink signal, the equivalent propagation distance, the receivers receiving the uplink signal, the transmitted signals received by the mobile appliance, the power of the received signal, and the power at which the mobile appliance transmitted the uplink signal; and,
- comparing the at least one figure of merit to at least one or more threshold values to determine whether the uplink signal is received directly from the mobile appliance or from the at least one repeater.

2. (Previously Presented) The method of claim 1, comprising quantifying the accuracy of the estimate; the association of the TA and the EPD; the receivers receiving the uplink signal; the

transmitted signals received by the mobile appliance and the relationship of the received power and the transmitted power to the TA.

3. (Original) The method of claim 2, wherein the step of determining at least one figure of merit is based on the quantifications.

4. (Previously Presented) The method of claim 3, wherein the quantification of the accuracy of the estimate is d1, the quantification of the association of the TA and the EPD is d2, the quantification of the receivers receiving the uplink signal is d3, the quantification of the transmitted signals received by the mobile appliance is d4 and the quantification of the relationship of the received power and the transmitted power to the TA is d5; and, wherein the figure of merit is a function of d1, d2, d3, d4, and d5.

5. (Original) The method of claim 4, wherein the figure of merit is $M = 5\sqrt{d_1 d_2 d_3 d_4 d_5}$.

6. (Previously Presented) The method of claim 1, further comprising selecting the location of the repeater if the uplink signal is determined to be from the repeater as the location of the mobile appliance.

7. (Previously Presented) The method of claim 1, further comprising selecting the estimate of the location if the uplink signal is determined to be directly from the mobile appliance as the location of the mobile appliance.

8.-30. (Cancelled).